

SUPPLY FAN VARIABLE FLOW CONTROLS ACCEPTANCE

CEC-NRCA-MCH-07-A (Revised 01/19)

CALIFORNIA ENERGY COMMISSION



CERTIFICATE OF ACCEPTANCE		NRCA-MCH-07-A
Supply Fan Variable Flow Controls Acceptance		(Page 1 of 3)
Project Name:	Enforcement Agency:	Permit Number:
Project Address:	City:	Zip Code:
System Name or Identification/Tag:	System Location or Area Served:	

Compliance Results: AUTOMATED ("Complies" or "Does Not Comply")	Enforcement Agency Use: Checked by/Date
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Intent:	Verify that the supply fan speed in a variable air volume system modulates to meet system airflow demand. Submit one Certificate of Acceptance for each system that must demonstrate compliance. NRCA-MCH-07-A can be performed in conjunction with NRCA-MCH-02-A Outdoor Air Acceptance since testing activities overlap.
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A. Construction Inspection					
Building:	Floor:	Room/Area/Zone:	Control/System:		
1. Supporting documentation needed to perform test includes:					
<input type="checkbox"/>	a.	Designs as approved by the authority having jurisdiction			
2. Prior to Functional Testing, verify and document the following:					
<input type="checkbox"/>	a.	Supply fan includes device(s) for modulating airflow, such as variable speed drive or electrically commutated motor. (NA7.5.6.1(a))			
	b.	Discharge static pressure sensors are either factory calibrated or field-calibrated (check one of the following): (NA7.5.6.1(b))			
	<input type="checkbox"/>	i.	Factory calibrated. Attach supporting documentation.		
	<input type="checkbox"/>	ii.	Field calibration. <ul style="list-style-type: none"> Measure static pressure as close to the existing sensor as possible using a calibrated hand-held measuring device Compare the field measured value to the value measured by the Building Automation System (BAS). When the value measured by the BAS is within 10 percent of the field-measured value, the sensor is calibrated. Attach supporting documentation. 		
<input type="checkbox"/>	c.	If the static pressure sensor is located downstream of major duct splits, multiple sensors are installed in each major branch with fan capacity controlled to satisfy the sensor furthest below its setpoint. (§140.4(c)2A)			
	d.	Setpoints (check one of the following):			
	<input type="checkbox"/>	i.	IF the system includes a direct digital control of individual zone boxes reporting to the central control panel, THEN static pressure setpoints will be reset based on the zone requiring the most pressure (i.e., the set point is reset lower until one zone damper is nearly wide open). (§140.4(c)2B)		
	<input type="checkbox"/>	ii.	Set point is no greater than one-third of the total design fan static pressure. (§140.4(c)2A) <table style="width: 100%; border: none;"> <tr> <td style="width: 50%; border: none;">Design TSP (in. w.c.):</td> <td style="width: 50%; border: none;">Setpoint (in. w.c.):</td> </tr> </table>	Design TSP (in. w.c.):	Setpoint (in. w.c.):
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Construction Inspection Compliance Results: AUTOMATIC ("Complies" or "Does Not Comply")					

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B. Functional Testing			
Building:	Floor:	Room/Area/Zone:	Control/System:
Prior to Functional Testing			
Steps		Results	
1.	Simulate demand for full design airflow (check all of the following): (NA7.5.6.2(Step 1))		
a.	Supply fan controls modulate to increase capacity. (NA7.5.6.2(Step 1)a)	P/F	
b.	IF it is a multiple zone system, THEN verify that the supply fan maintains discharge static pressure within +/-10 percent of the current operating setpoint. (NA7.5.6.2(Step 1)b)	P/F/NA	
c.	Supply fan controls stabilize within a 5 minute period. (NA7.5.6.2(Step 1)c)	P/F	
2.	Simulate demand for reduced or minimum airflow (check all of the following): (NA7.5.6.2(Step 2))		
a.	Supply fan controls modulate to decrease capacity. (NA7.5.6.2(Step 2)d)	P/F	
b.	Current operating setpoint has decreased (for systems with DDC to the zone level). (NA7.5.6.2(Step 2)e)	P/F	
c.	IF it is a multiple zone system, THEN verify that the supply fan maintains discharge static pressure within +/-10 percent of the current operating setpoint. (NA7.5.6.2(Step 2)f)	P/F/NA	
d.	Supply fan controls stabilize within a 5 minute period. (NA7.5.6.2(Step 2)g)	P/F	
3.	Restore system to normal operating conditions. (NA7.5.6.2(Step 3))		
Functional Testing Compliance Results: AUTOMATED ("Complies" or "Does Not Comply")			

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DOCUMENTATION AUTHOR'S DECLARATION STATEMENT		
1. I certify that this Certificate of Acceptance documentation is accurate and complete.		
Documentation Author Name:	Documentation Author Signature:	
Documentation Author Company Name:	Date Signed:	
Address:	ATT Certification Identification (If applicable):	
City/State/Zip:	Phone:	
FIELD TECHNICIAN'S DECLARATION STATEMENT		
I certify the following under penalty of perjury, under the laws of the State of California:		
<ol style="list-style-type: none"> 1. The information provided on this Certificate of Acceptance is true and correct. 2. I am the person who performed the acceptance verification reported on this Certificate of Acceptance (Field Technician). 3. The construction or installation identified on this Certificate of Acceptance complies with the applicable acceptance requirements indicated in the plans and specifications approved by the enforcement agency, and conforms to the applicable acceptance requirements and procedures specified in Reference Nonresidential Appendix NA7. 4. I have confirmed that the Certificate(s) of Installation for the construction or installation identified on this Certificate of Acceptance has been completed and signed by the responsible builder/installer and has been posted or made available with the building permit(s) issued for the building. 		
Field Technician Name:	Field Technician Signature:	
Field Technician Company Name:	Position with Company (Title):	
Address:	ATT Certification Identification (if applicable):	
City/State/Zip:	Phone:	Date Signed:
RESPONSIBLE PERSON'S DECLARATION STATEMENT		
I certify the following under penalty of perjury, under the laws of the State of California:		
<ol style="list-style-type: none"> 1. I am the Field Technician, or the Field Technician is acting on my behalf as my employee or my agent and I have reviewed the information provided on this Certificate of Acceptance. 2. I am eligible under Division 3 of the Business and Professions Code in the applicable classification to accept responsibility for the system design, construction or installation of features, materials, components, or manufactured devices for the scope of work identified on this Certificate of Acceptance and attest to the declarations in this statement (responsible acceptance person). 3. The information provided on this Certificate of Acceptance substantiates that the construction or installation identified on this Certificate of Acceptance complies with the acceptance requirements indicated in the plans and specifications approved by the enforcement agency, and conforms to the applicable acceptance requirements and procedures specified in Reference Nonresidential Appendix NA7. 4. I have confirmed that the Certificate(s) of Installation for the construction or installation identified on this Certificate of Acceptance has been completed and is posted or made available with the building permit(s) issued for the building. 5. I will ensure that a completed, signed copy of this Certificate of Acceptance shall be posted, or made available with the building permit(s) issued for the building, and made available to the enforcement agency for all applicable inspections. I understand that a signed copy of this Certificate of Acceptance is required to be included with the documentation the builder provides to the building owner at occupancy. 		
Responsible Acceptance Person Name:	Responsible Acceptance Person Signature:	
Responsible Acceptance Person Company Name:	Position with Company (Title):	
Address:	CSLB License:	
City/State/Zip:	Phone:	Date Signed: